Installation Guide

Watch our step-by-step maibec em+® siding installation video: Just scan this QR code using the app installed on your smart phone.

For optimal performance and appearance, and to benefit from all the advantages the maibec warranty has to offer, maibec em+® siding must be installed with great care. Before installing your siding, carefully read this guide completely to understand the correct steps and precautions to take to ensure a proper installation.

IMPORTANT: Compliance with maibec's installation, storage and maintenance requirements, and with building codes applicable in your region is mandatory. Problems caused by failure to comply with these requirements and codes may not be covered under applicable warranties. For any questions, please contact maibec's technical service toll-free at 1-800-363-1930, Monday to Friday from 8:30 a.m. to 4:30 p.m.

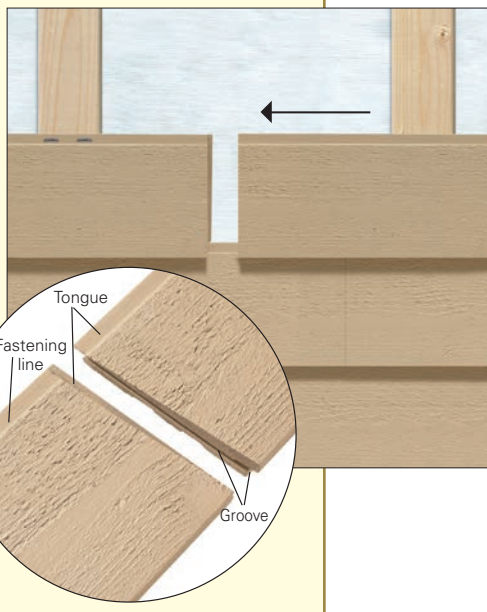
General Information

maibec em+® siding was developed to make installing maibec genuine wood siding easier. **The end-matched tongue and groove system allows boards to fit into one another. End joints do not need to be cut and joints can fall anywhere between two furring strips. As a result, maibec em+® siding requires less cutting, less stain touch-ups and no caulking.***

maibec em+® siding is secured to the wall with staples. We recommend using a pneumatic tool, which will be much quicker than working by hand. The fastening line is concealed by subsequent rows of siding, resulting in a uniform finish.** Like all maibec siding, maibec em+® siding is factory-made and stained on all surfaces.

If you prefer, you can also install maibec em+® siding by hand using stained maibec nails. Keep in mind that the nail heads will remain visible, however. If you choose this method, you must refer to the regular siding installation guide for nailing instructions.

For exterior use only.



*Unless otherwise specified.
** Due to the slight movements that occur naturally in wood and the adjustments that are sometimes necessary when installing this product, some staples may become visible at times. This is normal and will not impact the product's performance.

Residents of the Îles-de-la-Madeleine and coastal regions* – Unstained stainless steel grade 316 ringed nails must be used for installing maibec em+® siding in the traditional manner (with nails) and mouldings. Failure to comply with this requirement will void the warranties.**

*** Applicable coastal regions include those located less than 600 m (2,000 feet) from the coastline in the Atlantic provinces (New Brunswick, Prince Edward Island, Nova Scotia, Newfoundland and Labrador), Saint-Pierre-et-Miquelon, and in the U.S. East Coast states.

Warning

Do not install products which appear to be, or you believe to be non-conforming. For more details, contact us.

Before you begin, consult your national, provincial and local building codes for requirements regarding the installation of siding, breather membrane (housewrap), caulking, etc. Follow the manufacturer's instructions for installing the breather membrane and applying caulking.

For more information, consult the Government of Canada's *National Model Construction Codes* at *http://www.nationalcodes.nrc.gc.ca.*

Storage

- Store the siding in a dry and well-ventilated area. Do not place it directly on the ground.
- Always cover any unused siding after a day's work.
- Do not store the siding in a heated space, which can dry out the wood.
- Failure to follow these storage requirements may alter the dimensional properties of maibec em+® siding and make installation difficult.

1 Wall Preparation

- maibec® siding must be installed over a standard 16″ (406 mm) on centre stud built wall with OSB (Oriented Strand Board) sheathing or plywood, and an approved breather membrane. Use 1″ x 3″ (25 x 76 mm) furring strips. They must be kiln-dried, straight, without splits or nail holes to ensure a proper fastening base. Consult the building codes applicable in your region.
- The breather membrane and flashing must be installed according to building codes and the manufacturer's instructions.
- Use approved exterior tape around windows, doors and any opening to ensure a tight seal with the breather membrane.
- Install flashing over openings and in areas where moisture drainage is needed. The siding must be installed over furring strips to ensure airflow, allow for moisture drainage and reduce the risk of premature aging.
- To provide proper ventilation for the wall and prevent rodent and certain insect infestations, use the metallic starter trim or staple screening at the base of the wall. See on page 3.
- Verify the structural integrity of the wall, making certain that it is solid, straight and ready for siding to be installed. Verify that the wall's moisture drainage is ensured by a properly installed breather membrane and appropriate flashing.

Allow a minimum clearance of:

- 8″ (203 mm) from the ground,
- 1″ (25 mm) from adjacent horizontal structures (e.g. deck, low wall, moulding),
- 2″ (51 mm) from roof shingles.

Note: If you are using insulating concrete forms (ICF) or foam sheathing, please contact maibec for technical assistance.

2 Before You Begin, Make Sure:

Carefully plan the distribution of the boards on the walls. First, check the tally on the pallet identifying the product and the number of boards in each length. Arrange the boards on the wall so as to minimize the number of joints and cuts. Use longer boards above and beneath windows and on large areas. Use short segments of boards for small areas such as spaces between doors and windows. Alternate board lengths to avoid joint alignment. Boards measuring 4 feet to 10 feet (1.22 m to 3.05 m) in length should be installed between boards measuring 11 feet to 16 feet (3.35 m to 4.88 m) in length.

For a flawless finish, distribute the joints evenly on the entire surface.

Never install 2 boards longer than 12 feet (3.66 m) end to end.

3 Starter Course

To minimize the risk of rain splashing off the ground and onto the wood, the board must be installed be at least 8″ (203 mm) from the ground. The siding should never touch the ground.

Note: It is important that furring strips are nailed to the structure according to federal and provincial building codes as well as any applicable municipal regulations in your area.

In the Îles-de-la-Madeleine and coastal regions*, unstained stainless steel grade 316 ringed nails must be used for installing the starter course of em+ siding and mouldings. Failure to comply with this requirement will void the warranties.

* Applicable coastal regions include those located less than 600 m (2,000 feet) from the coastline in the Atlantic provinces (New Brunswick, Prince Edward Island, Nova Scotia, Newfoundland and Labrador), Saint-Pierre-et-Miquelon, and in the U.S. East Coast states.

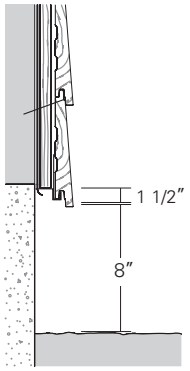
Important: Compliance with maibec's installation, storage and maintenance requirements, and with building codes applicable in your region is mandatory. Problems caused by failure to comply with these requirements and codes may not be covered under applicable warranties.

Starter Course (cont'd)

The starter course must be done as follows:

1. WITH the metallic starter trim

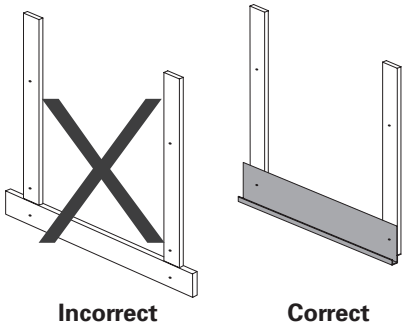
- Allows you to install the first row of maibec em+® siding without any visible nails.
- Acts as a level starter course around the entire building.
- Prevents rodent and certain insect infestations.
- Provides proper ventilation for the wall.



The metallic starter trim is designed only for installing siding horizontally on a wall with 1″ x 3″ (25 x 76 mm) kiln-dried furring strips at 16″ interval on centre.

The metallic starter trim must be used around the entire building, including inside and outside corners. It allows for a 1 1/2" overlap with the foundation.

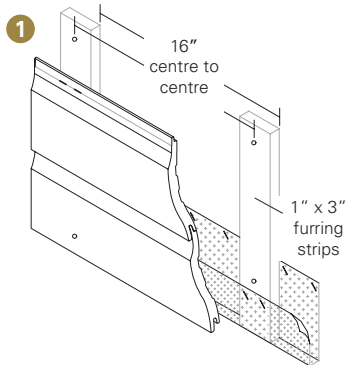
- Use a precision level (laser) or regular level to install the metallic starter trim. This starter course will serve as the reference point for beginning to install the maibec em+® siding. Nail horizontally every 16″.
- If there is a horizontal furring strip, it must be removed; otherwise the wall will not be properly ventilated.
- Install the metallic starter trim directly on the furring strips. The bottom of the furring strips should reach to the bottom of the starter trim.



If the wall does not have furring strips:

- Place 1″ x 3″ vertical furring strips on the wall at 16″ intervals on centre.
- Install the metallic starter trim directly on the furring strips. The furring strips should reach to the bottom of the starter trim.

Install the first row of siding according to the recommendations in the installation guide, and staple in place.

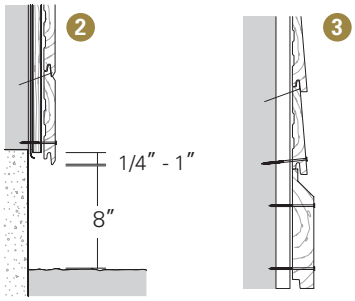


2. WITHOUT the metallic starter trim

Staple screening at the base of the wall. Fold back and fasten over the furring strips before installing the first row of siding (illustration 1).

a. Without any starter trim

To properly repel water from the wall, the starter board must extend past the furring strip by at least 1/4″ (6 mm), but not more than 1″ (25 mm). The starter course must be nailed in place as shown (illustration 2).



b. With maibec's regular skirt board

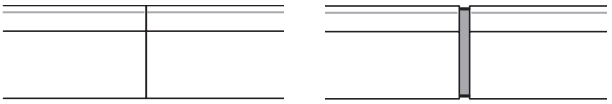
You can also use maibec's regular skirt board as a starter course. It fits all maibec horizontal siding profiles. In this case, press the back of the siding against the top of the skirt board and nail in place as shown (illustration 3).

Important: Compliance with maibec's installation, storage and maintenance requirements, and with building codes applicable in your region is mandatory. Problems caused by failure to comply with these requirements and codes may not be covered under applicable warranties.

4 Subsequent Courses

Horizontal Installation

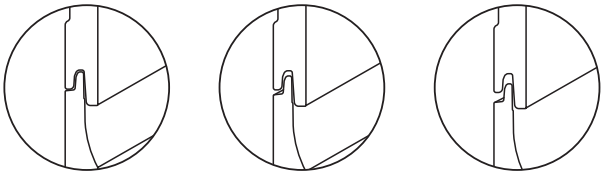
Fit boards tightly into one another lengthwise, with a maximum variance of 1/16" (1.5 mm) between boards.



Correct
0" (0 mm)

Incorrect
More than 1/16" (1.5 mm)

The upper alignment of boards can be adjusted up to a maximum of 1/16" (1.5 mm), taking care not to leave any visible staples.

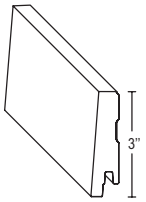


Correct
0" (0 mm)

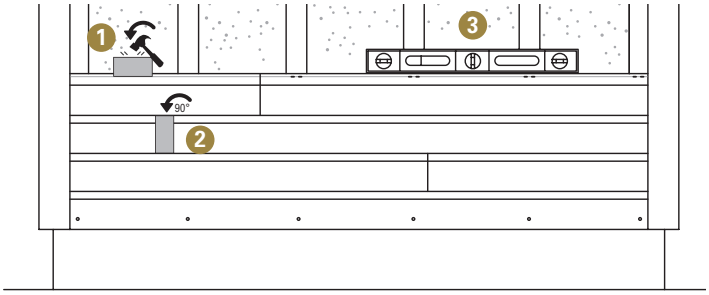
Acceptable
1/16" (1.5 mm)

Incorrect
More than 1/16" (1.5 mm)

TIPS:



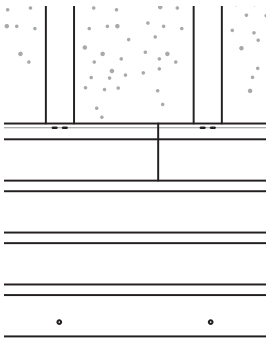
- To fit boards together tightly with a hammer without damaging the tongues and grooves, use a block of siding 3" (76 mm) high and of a length equal to the visible portion (illustration 1).
- As a gauge guide, turn the block of siding over at a 90° angle. The block should be equal to the visible surface. This means the boards are properly fitted together. If there is a space, the boards need to be fitted more tightly (illustration 2).
- Verify course alignment with a level every 3rd or 4th row and adjust the board as needed. A variance of 1/16" to 1/8" (1.5 mm to 3 mm) in height between boards is considered normal (illustration 3).
- Using a reference line 3/4 from the top of the wall, place nails every 8 feet so that you can take measurements that will allow you to periodically verify alignment and make slight adjustments as needed.



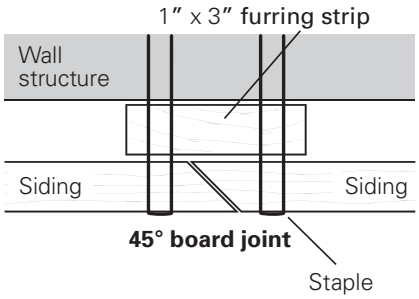
5 End Joints

End joints - board to board:

With maibec em+® siding, end joints do not need to be cut and joints can fall anywhere between two furring strips. No caulking is required. To prevent unwanted movement in the boards, use boards that are long enough to cover at least two furring strips.



If you have to make a joint cut, make 45° cuts at the ends of both boards to be butted, apply touch-up stain as recommended and fasten to the furring strip. No caulking is required.



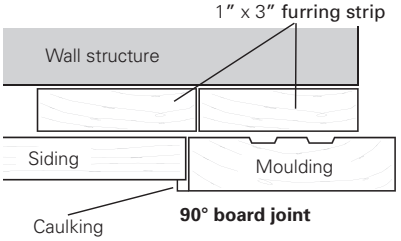
Important: Compliance with maibec's installation, storage and maintenance requirements, and with building codes applicable in your region is mandatory. Problems caused by failure to comply with these requirements and codes may not be covered under applicable warranties.

End Joints (suite)

End joints - board to moulding:

Cut the end of the board to be butted to the moulding at a 90° angle and at the appropriate length. Apply touch-up stain as recommended.

Apply caulking to the joint according to building codes and the manufacturer's recommendations.



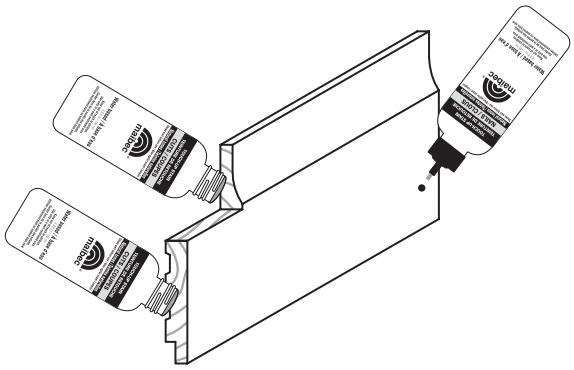
6 Touch-Up Stain

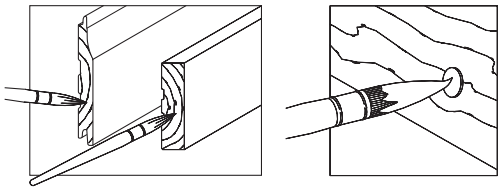
Apply touch-up stain to all cut or planed surfaces and to all bare wood, even if it will not be visible once the siding is installed. It is easier to touch up boards before they are installed.

For Natural Tones siding touch-ups, use the maibec touch-up applicator. You need (2) bottles for natural tones siding touch-ups – one bottle for the siding CUTS, one bottle for the NAILS. To entirely seal the wood, apply a sufficient amount of touch-up stain.

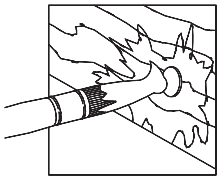
When using touch-up stain in a can, use a polyester, nylon, or any synthetic applicator with firm bristles approved for water-based coating.

Touch-up stain is only meant to be used in the area in need of it. It must not, under any circumstance, be applied over non-damaged factory coated material.





Apply precisely



Do not spillover or overbrush

For more information, see the touch-up guide that comes with the touch-up stain cans or kits, or go to *www.maibec.com*.

Fastening and Furring Strips

Use maibec staples as follows:

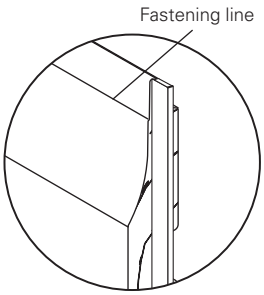
a. Staples

These are staples used solely for siding: 2'' (51 mm) length, 7/16" (11 mm) crown, 16 gauge, resin-coated stainless steel SUS 304 staples. For a list of compatible pneumatic staplers, go to *www.maibec.com* in the TECHNICAL INFORMATION section.

Warning: Specific safety rules must be followed when using pneumatic tools. Consult the manufacturer's user manual.

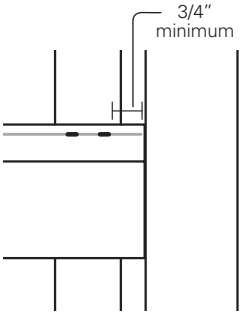
When fastening siding, always press the board firmly against the furring strip. Ensure staples have a minimum penetration of 1 1/4'' (30 mm) in a solid substrate.

Staples must be positioned directly along the fastening line indicated on the board's profile. Installing the staple above this line may cause the tongue to crack. Installing the staple below the line will cause it to be visible on the wall. For this reason, we strongly recommend using the maibec em+® stapler guide.



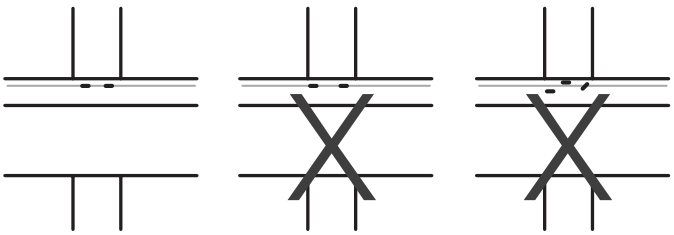
Do not install staples less than 3/4" (19 mm) from the ends of boards.

If you must fasten a board anywhere other than along the fastening line, use a stained maibec nail.



Install **TWO** staples centred on each furring strip at a 20° angle, leaving a 3/4" (19 mm) space between them.

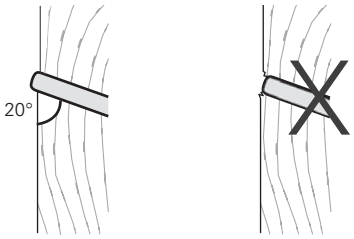
TIP: A wood block can be attached to the pneumatic tool to ensure a 20° angle.



Correct **Incorrect**

The staple head must not sink into the wood but sit flush on the surface.

Most pneumatic tools have an adjustable depth of drive. See the manufacturer's user manual.



Correct **Incorrect**

maibec em+® Stapler Guide

Makes installing maibec em+® siding fast and easy

- Ensures constant positioning along the fastening line
- Guarantees the desired angle when installing staples
- Facilitates the 3/4" spacing between staples

The maibec em+® stapler guide is compatible only with HITACHI™* (N5008 AC 1" and AC 2"), MAKITA™* (AT1150A), and SENCO™* (SNS50XP, SNS45XP, SNS44XP) staplers.

*The mentioned trade-marks are the property of their respective owners.

For more information, see the maibec em+® stapler guide instruction sheet at *www.maibec.com*.

maibec em+® Stapler Guide

b. Nails

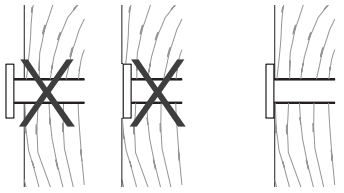
Stained maibec nails must be used on any edged boards that have had the tongue and groove system removed. Caulking cannot be used to hold the board in place. If you must fasten a board anywhere other than along the fastening line, use a stained maibec nail. Use maibec hot dipped zinc galvanized ring shank nails with textured heads, factory-stained to match the siding colour.

Lengths:

- 2″ (51 mm) for siding and 1″ fascia
- 3″ (76 mm) for all other regular mouldings

Ensure nails have a minimum penetration of 1 1/4″ (30 mm) in a solid substrate.

The nail head must not sink into the wood but sit flush on the surface.



Incorrect **Correct**

In the Îles-de-la-Madeleine and coastal regions*, unstained stainless steel grade 316 ringed nails must be used for installing maibec em+® siding in the traditional manner (with nails) and mouldings.

Failure to comply with this requirement will void the warranties.

To touch-up nail heads, please consult section 6.

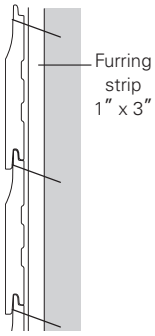
* Applicable coastal regions include those located less than 600 m (2,000 feet) from the coastline in the Atlantic provinces (New Brunswick, Prince Edward Island, Nova Scotia, Newfoundland and Labrador), Saint-Pierre-et-Miquelon, and in the U.S. East Coast states.

If you have to make a joint cut, make 45° cuts at the ends of both boards to be butted, apply touch-up stain as recommended and nail to the furring strip. No caulking is required.

c. Horizontal Installation, Vertical Furring Strips

Installing 1″ x 6″ (25 x 150 mm) siding:

Nail furring strips vertically 16″ (406 mm) on centre for horizontal installation.



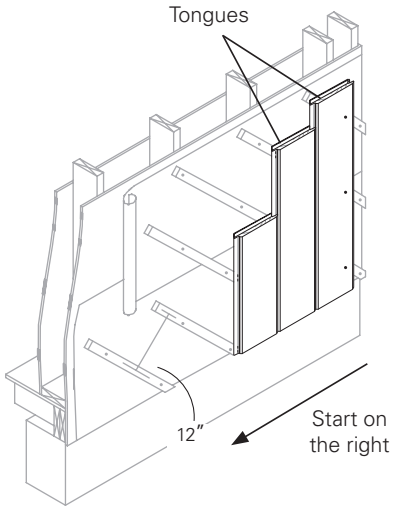
d. Vertical Installation, Diagonal Furring Strips

Modern, Contemporary and Channel profiles are well suited to vertical installation. However, a vertical installation may result in some visible staples. Install furring strips diagonally 12″ (300 mm) on center at a 45° angle.

It is important to install siding starting on the right side of the wall. The first board is installed with nails like a starter course, with staples used on all remaining boards.

To avoid water infiltration in the joint, the board must be installed with the tongue end facing upward. See drawing.

For nail and staple position, see instructions in sections 7a and 7b.



e. Diagonal Installation, Diagonal Furring Strips

Modern, Contemporary and Channel profiles are well suited to diagonal installation. However, a diagonal installation may result in some visible staples. A diagonal furring strip pattern is particularly useful when installing different profiles on the same wall surface. Install furring strips diagonally 12″ (300 mm) on centre at a 45° angle.

To avoid water infiltration in the joint, the board must be installed with the tongue end facing upward.

If this is not possible, it is imperative that you cut the ends of the boards at a 45° angle to avoid water infiltration in the joint. Touch-up stain must be applied and the ends of the board must be secured to the furring strip with nails or staples.

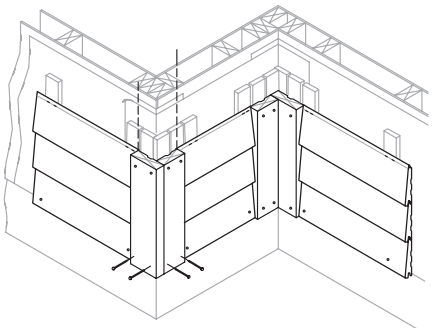
For nail and staple position, see instructions in sections 7a and 7b.

Important: Compliance with maibec's installation, storage and maintenance requirements, and with building codes applicable in your region is mandatory. Problems caused by failure to comply with these requirements and codes may not be covered under applicable warranties.

8 Corner Finish Details

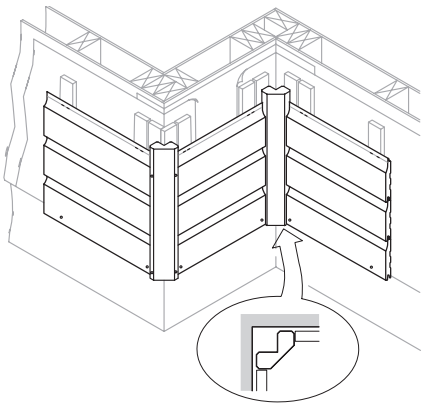
maibec recommends using wood or metal moulding to make corners.
Here are a few ways of installing mouldings:

2″ Inside or Outside Corner

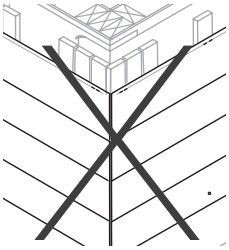


Corner, door and window mouldings must be installed before the siding is installed (except when using 1″ fascia – contact maibec for details).

Universal Corner



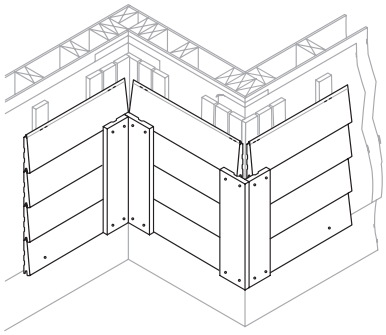
To avoid



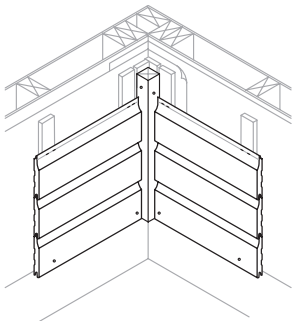
Incorrect

Do not join two pieces of siding cut at a 45-degree angle. Not only will this limit your options for making adjustments during the installation, but the shifts that occur naturally in wood will be more noticeable over time.

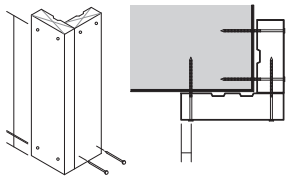
1″ (25 mm) Fascia



Inside Corner



Nailing Mouldings

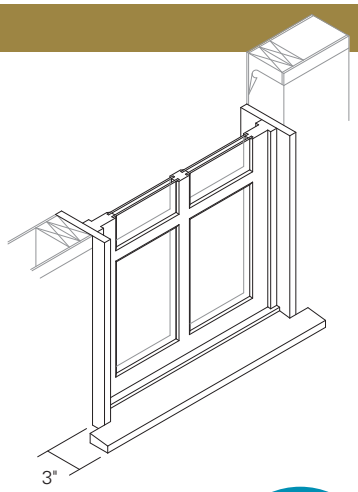


Every 16″ (406 mm), fasten 2 nails 3/4″ to 1″ (19-25 mm) from each edge.

9 Window or Door Finish Details

1. Choosing a Window or Door

- If you plan to install maibec mouldings, you must properly set the window or door depth according to the thickness of the furring strips (strapping), the chosen siding and the moulding. It is important that the moulding does not extend too far past the window or door frame in areas where water can accumulate (such as on headers and sills). See drawings in #3 of this section.
- If the siding butts to the frame, the frame must be as deep as the thickness of the wall and the siding combined.



Important: Compliance with maibec's installation, storage and maintenance requirements, and with building codes applicable in your region is mandatory. Problems caused by failure to comply with these requirements and codes may not be covered under applicable warranties.

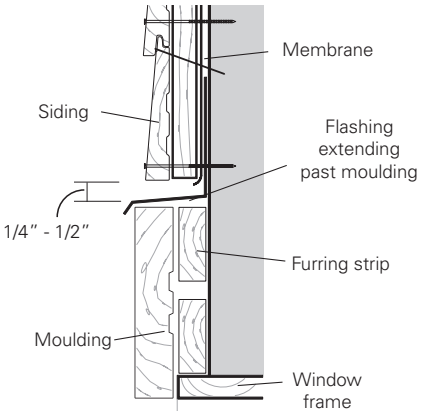
Window or Door Finish Details (cont'd)

2. Header Flashing

Steel flashing is essential to avoid water infiltration. It must be installed so that it covers and extends beyond the header moulding that will later be installed.

Leave a 1/4" to 1/2" (6 to 13 mm) space between the siding and the flashing for effective water drainage.

The adjacent drawing shows a flashing with a 2" (51 mm) inside or inside corner. If using a 1" fascia, please contact maibec for details.



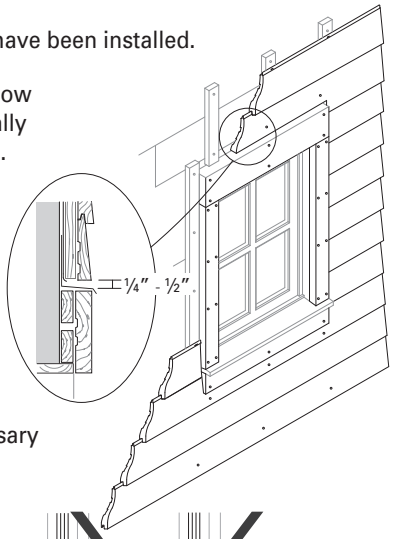
3. Siding Installation

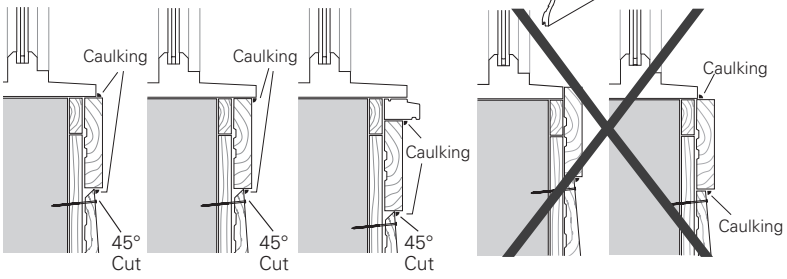
Install the siding only after the mouldings have been installed.

Since siding installed directly under a window cannot be fastened, you must nail it manually nailing it in place with stained maibec nails.

The same applies to siding installed directly over a window or door. These boards must also be manually nailed in place with maibec nails.

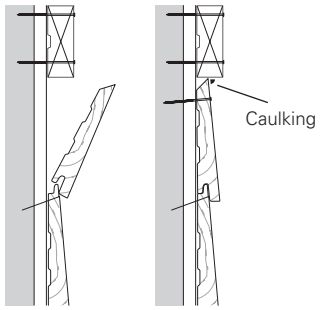
All flat horizontal surfaces (such as a window sill trim) are prone to water or snow accumulation. The use of flashing, caulking or a miter cut on the trim is necessary to prevent this accumulation.





4. Installation under a window

To help fit the course running under a window, cut the board at a 45° angle.



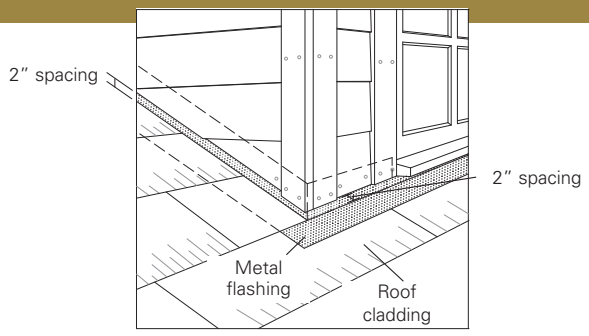
The 45° cut makes it easy to slide the piece into place without creating a large gap thus reducing the size of the caulking line. Be sure to nail the piece in place as shown.

10 Dormer/Roof Junction Finish Details

The siding must be spaced at least 2" (51 mm) when it ends adjacent to the roof surface.

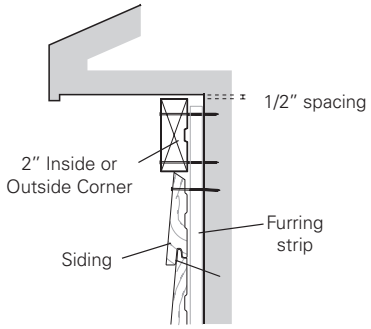
This spacing protects the siding by creating a channel wide enough to allow water to drain properly. This will also prevent the build-up of ice against the siding.

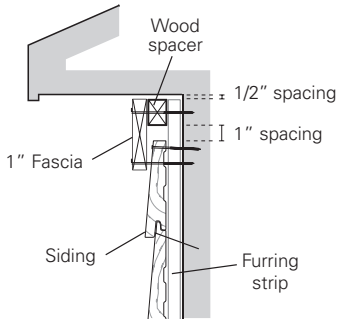
Be sure to nail the first course of siding in place as shown, except when using the metallic starter trim.



Important: Compliance with maibec's installation, storage and maintenance requirements, and with building codes applicable in your region is mandatory. Problems caused by failure to comply with these requirements and codes may not be covered under applicable warranties.

11 Top of Wall Finish Details





There are several ways to finish the top of a wall. The typical way is to install a moulding and then have the siding butt directly to it. This is generally done when the uppermost course of siding is wide enough for 2 nails. Siding that is at least 4" (102 mm) wide is acceptable. To facilitate air flow behind the siding, it is important to leave a 1/2" (13 mm) gap between the moulding and the soffit.

Be sure to nail the last course of siding in place as shown.

Alternatively, you can install a 1" (25 mm) fascia board over the installed siding. This is typically called "capping". A wood spacer is sometimes needed behind the fascia for a proper flush setting; particularly in the case of rabbeted bevel siding under a roof gable (sloped soffit). To facilitate air flow behind the siding, be sure to leave a 1" (25 mm) gap behind the fascia.

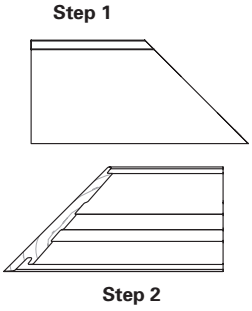
12 Gable Finish Details

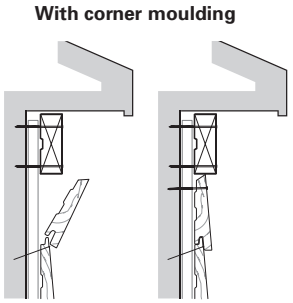
Finishing a gable is similar to finishing the top of a wall.

TIP: To make installing and fitting the pieces of siding together easier, cut the ends according to the angle of the gable (step 1). When using a corner moulding to finish, a 45° cut will make it easy to slide the piece into place without creating a large gap thus reducing the size of the caulking line (step 2).

Apply a coat of touch-up stain to the cut ends.

Be sure to nail the last course of siding in place as shown.





Maintenance

As with all sidings, dirt build-up can occur; this can be due to a number of factors such as surrounding vegetation, dust or air pollution. Periodic cleaning may be required. Clean the dirt off of the siding using a gentle water spray from a household low-pressure garden hose (under 100 psi). In rare instances where the dirt is not removed with a simple spray of water, you can gently scrub the surface using a soft brush and a non-abrasive laundry detergent, or a dishwasher detergent diluted as follows: 1/3 cup detergent for 3 litres of water. Because they produce suds, dish detergent are not recommended.

Rinse gently with a low-pressure garden hose (less than 100 psi). **Do not use a pressure washer.**

See the maibec Sidings Maintenance Guide for more details.

Drawings not to scale.

Important: Compliance with maibec's installation, storage and maintenance requirements, and with building codes applicable in your region is mandatory. Problems caused by failure to comply with these requirements and codes may not be covered under applicable warranties.

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